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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,162	09/30/2003	Hiroshi Ogasawara	501.43126X00	9821

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MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

COLAN, GIOVANNA B

ART UNIT	PAPER NUMBER
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2162

MAIL DATE	DELIVERY MODE
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11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Interview Summary	Application No.	Applicant(s)	
	10/673,162	OGASAWARA ET AL.	
	Examiner	Art Unit	
	Giovanna Colan	2162	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Giovanna Colan. (3) Carl Brundidge.
 (2) Cam Y. Truong. (4) _____.

Date of Interview: 25 October 2007.

Type: a) ☐ Telephonic b) ☐ Video Conference
 c) ☒ Personal [copy given to: 1) ☒ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
 If Yes, brief description: _____.

Claim(s) discussed: claim 1.

Identification of prior art discussed: Martin, Akizawa, Abe.

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: During the interview, applicant and examiners discussed the prior art and limitations of claim 1. Applicant argued that: "console processors" are not equivalent to the processors recited in the claims. Also applicant argued the limitation including "resetting said first processor..." and "re-supplying power..." recited in claim 1. Agreement was not reached.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.



 Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**MATTINGLY, STANGER,
MALUR & BRUNDIDGE, P.C.**

Fax

To: Examiner Colan**From:** Carl I. Brundidge**Fax:** 571 273-2752**Date:** September 11, 2007**Phone:** 571 272-2752**Pages:** 10**Re:** Agenda for Interview of Serial No.**CC:**

10/673,162

☒ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

TMI-5010

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): H. OGASAWARA, et al

Serial No.: 10/673,162

Filed: September 30, 2003

For: STORAGE DEVICE SYSTEM AND STORAGE DEVICE
SYSTEM ACTIVATING METHOD

Group: 2162

Examiner: G. B. Colan

AGENDA FOR INTERVIEW

The present application has pending claims 1-19.

As discussed with Examiner Colan during the telephone discussion of September 10, 2007 Applicant is very concerned with the examination of this application in light of the various incorrect allegations made throughout the prosecution of this application that have not been changed or reconsidered in light of clear evidence to the contrary. Accordingly Applicant respectfully requests close scrutiny of the examination of this case be given and that each of the allegations be discussed during the interview prior to issuing a further Office Action.

In the Office Action claims 1-19 stand rejected under 35 USC §103(a) as being unpatentable over Martin (U.S. Patent No. 5,504,873) in view of Akizawa (U.S. Patent No. 5,548,724) and further in view of Abe (U.S. Patent No. 6,880,104). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1-19 are not taught or suggested by Martin, Akizawa

or Abe whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Independent claims 1 and 15, from which the remaining claims depend, clearly recite that the present invention provides a storage device system and a method of activating a storage device system, wherein the storage device system includes a plurality of storage devices in which information is stored, a storage device control section for controlling storage of information in the storage devices, a connection unit connected to the storage device control section and first and second processors.

According to the present invention the first processor is connected to a local area network (LAN) external to the storage device system and converts data of a file access form received over the LAN into data of a block access form.

Further, according to the present invention the second processor is connected to the storage device control section via the connection unit and accesses the storage devices via the connection unit and the storage device control section in response to data of the block access form issued from the first processor.

Particularly, according to the present invention as now more clearly recited in the claims the second processor controls activation of the first processor including resetting the first processor by the second processor, re-supplying power to the first processor and activating a Basic Input/Output System (BIOS) of the first processor.

The above described features of the present invention clearly recited in the claims are illustrated, for example, in Fig. 17 and described in the corresponding portions of the specification.

The above described features of the present invention clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention as now more clearly recited in the claims are not taught or suggested by Martin, Akizawa or Abe whether taken individually or in combination with each other as suggested by the Examiner.

In the Office Action the Examiner incorrectly alleges that the control processor 114 of Martin corresponds to the first processor as recited in the claims. Further, the Examiner incorrectly alleges that the control processor 114 of Martin is connected to a local area network (LAN) external to the storage system 10 via signal lines 95 and 80 the same as the first processor recited in the claims.

It is abundantly clear that the Examiner has completely mis-described the teachings of Martin in a failed attempt to support her allegations that Martin teaches features corresponding to the features recited in the claims.

For example, signal line 95 as taught by Martin is not a LAN nor is it connected to a LAN external of the storage system 10 as recited in the claims. Signal line 95 as taught by Martin connects the control processor 114 to each of the IFS computers 19, 14, 16, and 18. The control processor 114 and the IFS computers 19, 14, 16, and 18 are clearly internal of the storage system

10. Element 80 is simply a disk device included in each the IFS computers 19, 14, 16, and 18.

It appears the Examiner is confused as to what Fig. 2A of Martin represents. Fig. 2A of Martin simply illustrates the internal details of each of the elements included in the storage system 10 as illustrated in Fig. 1. Thus, all of the elements illustrated in Fig. 2A of Martin are internal of the storage system 10.

Thus, when Fig. 2A is properly viewed, the control processor 114 as taught by Martin forms a part of the control subsystem 40 which is not connected to a LAN external to the storage system, nor does it receive data on a LAN external to the storage system from a host computer to be stored in the storage devices included in the storage system, nor does it perform a conversion of the data received from the host computer on a LAN external to the storage system so as to convert data of the file access form into data of the block access form which is stored in the storage devices as recited in the claims.

Martin teaches in col. 4, lines 48-59 thereof that:

"The control subsystem 40 allocates and de-allocates the common resources present in the mass storage library system 10. When an interface tape server computer 14, 16 or 18 or the interface disk server computer 19 receives a command to read or write data, it first requests resources (i.e., files or volumes) from the control subsystem computer 40 which will then initialize and position the appropriate resources and inform the requesting IFS of resource availability. Control of the recorder resources is then passed to the requesting IFS. Once the operation is complete, the controlling IFS notifies the control computer 40 and the resources are de-allocated."

Thus, as is clear from the above the control processor 114 is not connected in the same manner, nor does it perform the same or similar functions, as the first processor as recited in the claims completely contrary to the allegations by the Examiner.

In the Office Action the Examiner incorrectly alleges that the console processor 116 of Martin corresponds to the second processor as recited in the claims. In addition the Examiner incorrectly alleges that the console processor 116 of Martin is connected to the storage device control section via a connection unit 110. Further, the Examiner incorrectly alleges that the console processor 116 accesses the storage devices via the connection unit 110 and the storage control section in response to data of the block access form from the first processor and that the console processor 116 controls activation of the first processor.

Again it is abundantly clear that the Examiner has completely mis-described the teachings of Martin in another failed attempt to support her allegations that Martin teaches features corresponding to the features recited in the claims.

For example, the console processor 116 as taught by Martin is included as part of the control subsystem 40 described above. Although the console processor 116 is shown in Martin as being connected to the control processor 114 via a signal line 110, there is absolutely no teaching or suggestion in Martin that data is exchanged between the control processor 114 and the console processor 116 similar to that of the first and second processors as recited in the claims. More particularly, there is no teaching or suggestion in Martin that the console processor receives converted data of

the block access form from the control processor 114 from external of the storage system, that the converted data of the block access form was converted from data of the file access form, and that the converted data of the block access form is stored in the storage devices as recited in the claims. The Examiner seems not to understand this feature nor has the Examiner properly addressed these features in the claims.

Further, in the Office Action the Examiner incorrectly alleges that the console processor 116 of Martin controls activation of the control processor 114 including resetting the control processor 114 by the console processor 116, re-supplying power to the control processor 114 and activating a Basic Input/Output System (BIOS) of the control processor 114 as in the present invention as recited in the claims.

The above noted allegation by the Examiner is simply false. The passages in Martin referred to by the Examiner in the Office Action to support the above noted allegation do not provide any support whatsoever. In fact the passages in Martin referred to by the Examiner in the Office Action teach away from the features recited in the claims.

Applicant again emphasizes that one basic factor the Examiner has failed to address is how the control processor 114 and console processor 116 as taught by Martin are equivalent to the first and second processors as recited in the claims. The claims clearly recite that the first processor receives data of a file access form from the host computer on a LAN external of the storage system and converts the data of the file access form to data of a block access form and the second processor receives the data of the block access form and transfers the data to the disk drive. The control processor 114 and

console processor 116 as taught by Martin form a part of the control subsystem 40 which "allocates and de-allocates the common resources present in the mass storage library system 10. In other words the control processor 114 and console processor 116 as taught by Martin operate together to control the operations of the IFS computers 19, 14, 16, and 18, the switch module 42, the drive unit 44 and the transport system 56. There is absolute no teaching, suggestion or even disclosure in Martin that the control processor 114 and console processor 116 are equivalent to the first and second processors as recited in the claims.

Further, according to the present invention the first and second processors as recited in the claims perform processings with respect to file access type data and block access type data. The Examiner has not shown where such teaching can be found in Martin besides the incomplete allegation that a conversion process is performed in Martin. Those of ordinary skill in the art clearly understand that a file access or file access type data is quite different from a block access of block access type data. Thus, the first processor performs functions in the handling of data differently than the second processor and a conversion is performed between the two different types of data according to the present invention.

There is no similar teaching in Martin. In Martin, the control processor 114 and console processor 116 merely perform the control of allocations of resources as described in col. 4, lines 48-59. There is absolutely no teaching or suggestion in Martin that one of the control processor 114 and console processor 116 performs processing according to file access type data and that the other of the control processor 114 and console processor 116

performs functions according to block access type data as in the present invention.

Thus based on all of the above, Martin fails to teach or suggest a first processor that is connected to a local area network (LAN) external to said storage device system, that converts data of a file access form received over said LAN into data of a block access form as recited in the claims.

Further, Martin fails to teach or suggest a second processor that is connected to said storage device control section via said connection unit, that accesses said plurality of storage devices via said connection unit and said storage device control section in response to data of the block access form issued from said first processor, and that controls activation of said first processor including resetting said first processor by said second processor, re-supplying power to said first processor and activating a Basic Input/Output System (BIOS) of said first processor as recited in the claims.

The above described deficiencies of Martin are not supplied by Akizawa. Akizawa is merely relied upon by the Examiner for an alleged teaching of converting information of a first form received over the external network into information of a second form. However, at no point is there any teaching or suggestion in Akizawa of the above described features of the present invention now more clearly recited in the claims that are not taught or suggested by Martin. More particularly Akizawa does not teach or suggest the conversion of file access type data to block access type data as recited in the claims.

The above described deficiencies of both Martin and Akizawa are not supplied by Abe. Abe merely discloses that a memory protection unit obtains

control of a DIMM 31 from a chip set by way of switching switches 11 and 12 when detecting an unexpected power shutdown. Abe is completely silent as to the activation of a NAS processor, in other words a processor included in a storage system that as recited in the claims.

In the Office Action the Examiner attempts to equate the memory protection unit 10 of Abe to the second processor (i.e. I/O processor) as recited in the claims. However, the memory protection unit 10 of Abe is quite different from I/O processor of the present invention as recited in the claims. The I/O processor of the present invention as recited in the claims performs accessing of storage devices in response to data in block access form received from the NAS processor. Such features are clearly and absolutely not taught or suggested by Abe.

Thus, Martin, Akizawa and Abe all suffer from the same deficiencies relative to the features of the present invention as now more clearly recited in the claims. Therefore, combining Martin, Akizawa and Abe in the manner suggested by the Examiner in the Office Action does not render obvious the claimed invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 USC §103(a) rejections of claims 1-19 as being unpatentable over Martin in view of one or more of Akizawa and Abe is respectfully requested.

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